WHAT IS CLAIMED IS:

1. A diploid animal cell containing an engineered mutation in at least one allele of the gene encoding the ε isozyme of protein kinase C (PKCε).

2. The cell of Claim 1, wherein said cell is a mouse cell.

3. The cell of Claim 2, wherein, due to said engineered mutation, the cell's levels of PKCε activity are less than the levels of PKCε activity in *wild-type* cells.

4. The cell of Claim 3, wherein said mutation is a deletion mutation.

5. The cell of Claim 1, wherein the cell is homozygous for the mutation.

6. A non-human transgenic animal comprising the cell of Claim 1.

7. An animal that is a descendent of the non-human transgenic animal of Claim 6 and comprises said engineered mutation.

8. The animal of Claim 7, wherein, due to said engineered mutation, the animal's levels of PKCε activity are less than the levels of PKCε activity in *wild-type* animals.

9. The animal of Claim 8, wherein the cells of said animal are homozygous for said engineered mutation.

10. A method of identifying a compound that modulates anxiety, said method comprising:

selecting, as a test compound, a compound that modulates the activity of PKCε, and

administering said test compound to a subject to determine whether the symptoms of anxiety are modulated.

11. A method of modulating consumption of a drug of abuse, said method comprising:

administering an effective amount of a modulator of PKCε.

12. The method of claim 11, wherein said drug of abuse is selected from the group consisting of: alcohol, psychostimulants, opiates and sedative-hypnotic drugs.

13. The method of claim 11, wherein said modulator is an inhibitor of PKCε.

14. The method of claim 13, wherein said inhibitor is a selective inhibitor of PKCε.

15. The method of claim 13, wherein said inhibitor is a peptide selected from the group consisting of: εV1-1, εV1-2, εV1-3, εV1-4, εV1-5, εV1-6 and εV1-7.

16. A method of modulating the effects of a drug of abuse, said method comprising: administering to a person, an effective amount of a modulator of PKCε.

17. The method of claim 16, wherein said modulator is an inhibitor of PKCε and said effects of the drug of abuse are enhanced.

18. The method of claim 16, wherein said modulator is an activator of PKCε and said effects of the drug of abuse are reduced.

19. A method of treating a condition amenable to treatment by an allosteric modulator of a $GABA_A$ receptor, said method comprising: administering to a subject having such condition, an effective amount of an inhibitor of PKCε.

20. The method of claim 19, wherein said condition is selected from the group consisting of: anxiety, addiction, withdrawal syndrome, skeletal muscle spasms, convulsive seizures, and epilepsy.

21. The method of claim 19, further comprising administering to said person, an effective amount of an allosteric agonist of a $GABA_A$ receptor.

22. A method of determining the likelihood that a person will become dependent upon or an abuser of a drug of abuse, said method comprising:

analyzing a sample containing PKCε or nucleic acid encoding PKCε from a person to determine PKCε activity or concentration in said person;

comparing said activity or concentration with a standard value selected from a range of PKCε activities or concentrations, respectively, for similar samples obtained from a population of persons having a known characteristic with respect to dependence on a drug of abuse; and

relating said activity or concentration of PKCε to said standard value, wherein a statistically different activity or concentration is predictive of the degree of likelihood of said person becoming dependent upon or an abuser of said drug of abuse.

23. A composition comprising an inhibitor of PKCε and an agonist of a $GABA_A$ receptor.

24. The composition of claim 23, wherein said agonist is an allosteric agonist.

25. The composition of claim 24, wherein said allosteric agonist is a benzodiazepine.

26. The composition of claim 25, wherein said benzodiazepine is selected from the group consisting of: alprazolam, chlordiazepoxide, chlordiazepoxide hydrochloride, chlormezanone, clobazam, clonazepam, clorazepate dipotassium, diazepam, droperidol, estazolam, fentanyl citrate, flurazepam hydrochloride, halazepam, lorazepam, midazolam hydrochloride, oxazepam, prazepam, quazepam, temazepam, and traizolam.

27. The composition of claim 24, wherein said allosteric agonist is a barbituate.

28. The composition of claim 27, wherein said barbituate is selected from the group consisting of: amobarbital, amobarbital sodium, aprobarbital, butabarbital sodium, hexobarbital sodium, mephobarbital, metharbital, methohexital sodium, pentobarbital, pentoberbital sodium, phenobarbital, phenobarbital sodium, secobarbital, secobarbital sodium, talbutal, thiamylal sodium, and thiopental sodium.

add 27 add c6 > add 01